



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/784,551	02/16/2001	Petter Ericson	64242	3125

7590 08/28/2003

NORMAN H. ZIVIN
Cooper & Dunham LLP
1185 Avenue of the Americas
New York, NY 10036

EXAMINER

SAID, MANSOUR M

ART UNIT

PAPER NUMBER

2673

DATE MAILED: 08/28/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/784,551

Applicant(s)

ERICSON ET AL.

Examiner

MANSOUR M SAID

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 16 February 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-40, 42 and 43 is/are rejected.
- 7) ☐ Claim(s) 5 & 41 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4 & 7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claim 30 is rejected under 35 U.S.C. 102(e) as being anticipated by Seybold (6,128,007).**

As to claim 30, Seybold teaches that using of an absolute position-coding pattern in order to cause an input unit arrangement, preferably with a mouse function mode (first mode or cursor mode) to switch from a first to a second function (figures 1, 5, 7-16, abstract, column 2, lines 23-34, column 3, lines 50-65 and column 5, lines 20-35).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 10-20, 22-23, 31-34, 36-40 and 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seybold in view of Rabin (6,603,464 B1).

As to claim 1, Seybold teaches an input unit (stylus, (figure 2, (8))) arrangement with a mouse function mode (first mode or cursor mode) and an input function mode (second mode or input mode) (abstract column 2, lines 25-56), comprising a recording device for recording (recording cursor or stylus image) (column 1, lines 10-25 and column 3, lines 1-6) and a signal-processing device for processing to achieve the mouse function mode and the input function mode (abstract column 2, lines 25-56, column 3, lines 50-67 and column 4, lines 1-23), characterized in that the input unit arrangement is arranged to switch from the input function mode to the mouse function mode when the signal-processing device detects a predetermined position-coding pattern image (cursor image or stylus image) (figures 1-12, column 3, lines 50-67 and column 4, lines 1-23, column 4, lines 48-67 and column 5, lines 17-35).

Seybold does not expressly disclose that an image-recording device for recording images.

However, Rabin teaches a pen (figure 1, (10)) that has an image-recording (camera, (figure 2, (24))) for recording images (column 3, lines 1-29).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Rabin's input device having a camera into Seybold input

Art Unit: 2673

device so as to capture still and/or moving images such as a charged coupled device imaging unit to that to increase the versatility of the device (column 3, lines 15-25 and column 4, lines 59-65).

As to claim 2, Seyhold teaches that an input unit (pen, (figure 1, (10))) which is arranged to switch from the mouse function mode (first mode or cursor mode) to the input function mode (second mode or input mode) when the signal-processing device detects a different pattern to the predetermined position-coding pattern in one of the images (cursor image or stylus image) (figures 1-12, column 3, lines 50-67 and column 4, lines 1-23, column 4, lines 48-67 and column 5, lines 17-35).

As to claims 3, 34, and 39, Seyhold teaches the mouse function mode (first mode or cursor mode) is arranged to generate, on the basis of the predetermined position-coding pattern signals for positioning a cursor on a display (figures 1, 5, 7-16, abstract, column 2, lines 23-34, column 3, lines 50-65 and column 5, lines 20-35).

As to claims 4 and 33, Seyhold teaches that the predetermined position-coding pattern is a first subset (figures 10-11) of an absolute position-coding pattern and codes a plurality of positions (figure 15, column 5, lines 45-54), and wherein the input unit arrangement is arranged to carry out the switching from the input function mode to the mouse function mode when the signal-processing device detects one of the plurality of positions on the basis of the predetermined position-coding pattern (figures 1, 5, 7-16, abstract, column 2, lines 23-34, column 3, lines 50-65 column 5, lines 20-35, column 5, lines 67).

As to claims 6 and 42, Seyhold teaches that the first subset of the absolute position-coding pattern (figure 15, column 5, lines 45-54) is divided into at least two regions and wherein the input unit (pen, (figure 1, (10))) arrangement is arranged to carry out different partial

Art Unit: 2673

functions depending upon which of the at least two regions the signal-processing device detects (figures 1, 5, 7-16, abstract, column 2, lines 23-34, column 3, lines 50-65, column 5, lines 20-35, column 5, lines 67).

As to claim 7, Seyhold teaches the absolute position-coding pattern codes (figure 15, column 5, lines 45-54) absolute positions on a virtual coordinate surface, and wherein there are defined on the virtual coordinate surface at least two unique regions (tablet and display, (figures 1,10-11 & 16) which are each dedicated to a redetermined function mode or to a predetermined partial function within a function mode (figures 1, 5, 7-16, abstract, column 2, lines 23-34, column 3, lines 50-65, column 5, lines 20-35, column 5, lines 67).

As to claim 8, Seyhold teaches that. An input unit arrangement according to claim 7, which contains information about at least part of the virtual coordinate surface and is arranged to identify the region (tablet and display, (figures 1,10-11 & 16) which contains a position coded (figure 15, column 5, lines 45-54) by a current image (cursor image and stylus image) and to carry out the function mode or partial function which is associated with the identified region (figures 1, 5, 7-16, abstract, column 2, lines 23-34, column 3, lines 50-65, column 5, lines 20-35, column 5, lines 67).

As to claim 9, Seyhold teaches that the mouse function mode (first mode or cursor mode) comprises a relative mouse function (figures 1, 5, 7-16, abstract, column 2, lines 23-34, column 3, lines 50-65 and column 5, lines 20-35).

As to claim 10, Seyhold teaches that the mouse function mode (first mode or cursor mode) comprises an absolute mouse function ((figures 1, 5, 7-16, abstract, column 2, lines 23-34, column 3, lines 50-65 and column 5, lines 20-35).

Art Unit: 2673

As to claim 12, Seyhold teaches that the mouse function mode comprises a control function (first mode or cursor mode), in which commands are generated to an electronic unit communicating with the input unit (stylus, (figure 2, (8)) arrangement for controlling the same (figures 1, 5, 7-16, abstract, column 2, lines 23-34, column 3, lines 50-65 and column 5, lines 20-35).

As to claim 13, Seyhold teaches that the input function mode (pen function, (figures 1-3) comprises a scanner (scanner, (figure 2, (18)) function, such as an image (cursor image or stylus image) or text inputting function (figures 1-3, abstract, column 3, lines 11-29, column 3, lines 50-63, column 4, lines 60-65 and column 6, lines 40-59).

As to claim 14, Rabin teaches that the input function mode (pen function, (figures 1-3) comprises a photographing function (capturing video data) (figures 1-3, abstract, column 3, lines 11-29, column 3, lines 50-63, column 4, lines 60-65 and column 6, lines 40-59).

As to claim 15, Seyhold teaches that the input function mode (second mode or input mode) comprises a handwriting recording function ((figures 6-16, abstract, column 2, lines 35-56, column 4, lines 1-35 and column 20, lines 20-67).

As to claim 16, Seybold teaches an input unit (stylus, (figure 2, (8)) arrangement with a mouse function mode (first mode or cursor mode) and an input function mode (second mode or input mode) (abstract column 2, lines 25-56), comprising a recording device for recording (recording cursor or stylus image) (column 1, lines 10-25 and column 3, lines 1-6) and a signal-processing device for processing to achieve the mouse function mode and the input function mode (abstract column 2, lines 25-56, column 3, lines 50-67 and column 4, lines 1-23), characterized in that the input unit arrangement is arranged to switch from the input function

Art Unit: 2673

mode to the mouse function mode when the signal-processing device detects a predetermined position-coding pattern image (cursor image or stylus image) (figures 1-12, column 3, lines 50-67 and column 4, lines 1-23, column 4, lines 48-67 and column 5, lines 17-35), determine a position based on the detected part, and establish to which of at least two regions the position belongs (control buttons, (figure 16, (6)) & tablet surfaces, (figure 16, (90 & 92) (column 5, lines 43-67), the input unit (stylus, (figures 2, 10-11 and 16) arrangement being arranged to carry out different functions depending on which region the signal-processing device establishes (column 5, lines 15-67).

Seybold does not expressly disclose that an image-recording device for recording images.

However, Rabin teaches a pen (figure 1, (10)) that has an image-recording (camera, (figure 2, (24)) for recording images (column 3, lines 1-29)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Rabin's input device having a camera into Seybold input device so as to capture still and/or moving images such as a charged coupled device imaging unit to that to increase the versatility of the device (column 3, lines 15-25 and column 4, lines 59-65).

As to claim 17, Seybold teaches that is arranged to generate a command for controlling an electronic device communicating with the input unit arrangement when it detects a first of the at least two regions (figures 1-16, column 2, lines 25-67, column 3, lines 50-67 and column 5, lines 16-17).

As to claim 18, Seybold teaches that the command is a command for executing software on the electronic device (figures 6-9 and 15, column 4, lines 1-23, column 4, lines 47-67 and column 6, lines 5-19). As to claim 19, Seybold teaches that execute a relative mouse function

Art Unit: 2673

(first mode or cursor mode) when the signal-processing device detects a position within a region dedicated to relative mouse function and an absolute function when the signal-processing device detects a position within a region dedicated to absolute mouse function (figures 1, 5-10 & 15, abstract, column 2, lines 25-42, column 3, lines 50-67 and column 6, lines 50-67).

As to claim 19, Seybold teaches an input unit which is arranged to execute a relative mouse function when the signal processing device detects a position within a region dedicated to relative mouse function and an absolute function when the signal processing device detects a position within a region dedicated to absolute mouse function (figures 1, 5, 7-16, abstract, column 2, lines 23-34, column 3, lines 50-65 column 5, lines 20-35, column 5, lines 67).

As to claim 20, Seybold teaches that executing the relative and the absolute mouse function, is arranged to generate, on the basis of the absolute position-coding pattern, signals for positioning a cursor on a display (figures 1, 5-10 & 15, abstract, column 2, lines 25-42, column 3, lines 50-67 and column 6, lines 50-67).

As to claims 22 and 31, Seybold teaches that an input unit arrangement with at least a first (first mode or stylus mode) and a second function (second mode or cursor mode) (figures 5-9 & 16, abstract, column 2, lines 25-56, column 3, lines 50-67 & column 4, lines 1-35), comprising a recording device for recording for recording images and a signal-processing device (20, 210) for processing the images (cursor & stylus images) (column 1, lines 10-25 and column 3, lines 1-6), characterized in that the input unit arrangement is arranged to switch from the first function to the second function when the signal-processing device detects a predetermined position-coding pattern in one of said images (cursor image or stylus image) (figures 1-12,

Art Unit: 2673

column 3, lines 50-67 and column 4, lines 1-23, column 4, lines 48-67 and column 5, lines 17-35).

Seybold does not expressly disclose that an image-recording device for recording images.

However, Rabin teaches a pen (figure 1, (10)) that has an image-recording (camera, (figure 2, (24)) for recording images (column 3, lines 1-29).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Rabin's input device having a camera into Seybold input device so as to capture still and/or moving images such as a charged coupled device imaging unit to that to increase the versatility of the device (column 3, lines 15-25 and column 4, lines 59-65).

As to claims 23 and 32, Rabin teaches that the signal-processing device is designed to process the images to achieve at least one of said functions (figure 1, (10)) & figures 2, (24)) for recording images (figures 1-3, abstract, column 3, lines 11-29, column 3, lines 50-63, column 4, lines 60-65 and column 6, lines 40-59).

As to claim 36, Seybold teaches that the input unit arrangement comprises a mouse function mode (first mode or cursor mode) and an input function mode (second mode or stylus mode), the input unit arrangement automatically switching from the input function mode to the mouse function mode when the signal-processing device detects a predetermined position-coding pattern in one of said images (cursor image or stylus image) (figures 1-12, column 3, lines 50-67 and column 4, lines 1-23, column 4, lines 48-67 and column 5, lines 17-35).

As to claim 37, Seybold teaches that the mouse function mode (first mode or cursor mode) and the input function mode (second mode or stylus mode) are at least partly based on the images processed by the signal-processing device (cursor image or stylus image) (figures 1-12,

Art Unit: 2673

column 3, lines 50-67 and column 4, lines 1-23, column 4, lines 48-67 and column 5, lines 17-35).

As to claim 38, Seybold teaches that the input unit arrangement is automatically switched from the mouse function mode to the input function mode when the signal-processing device detects a pattern other than the predetermined position-coding pattern in one of said images (figures 1-16, abstract, column 5, line 45-67, column 5, lines 64, column 6, lines 1-45 and column 7, lines 1-6).

As to claim 40, Seybold teaches that the input unit arrangement in the mouse function mode at least partly uses the detected position for controlling a cursor on a display (figures 1, 5, 7-16, abstract, column 2, lines 23-34, column 3, lines 50-65 and column 5, lines 20-35).

As to claim 43, Seybold teaches that the input function mode (second mode or stylus mode, (figures 1-3) comprises at least one of the functions a scanner function (scanner, (figure 2, (18)), such as an image (cursor image or stylus image) or text inputting function, a photographing function an image-recording (camera, (figure 2, (24)) for recording images (column 3, lines 1-29) and a handwriting recording function ((figures 6-16, abstract, column 2, lines 35-56, column 3, lines 11-29, column 3, lines 50-63, column 4, lines 1-35 and column 20, lines 20-67).

5. Claims 11, 21 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seybold in view of Rabin as applied to claims 1, 16 and 31 above, and further in view of Hamamura et al. (6,567,120 B1; hereinafter referred to as Hamamura).

As to claims 11, 21 and 35, Seybold and Rabin disclose all claimed limitation except that the mouse function more comprises a scrolling function.

Hamamura teaches the mouse function more comprises a scrolling function (scroll key, (figure 2, (7E)) (column 4, lines 1-12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Hamamura's input device teaching a scrolling function into Seybold's modified device so as to scroll the screen in up and down directions when the list of recorded information is displayed on the display (column 4, lines 10-12).

6. Claims 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Du et al. (5,856,822; hereinafter referred to as Du).

As to claim 24, Du teaches that a pad (touch pad (figure 1, (20)) provided with position-coding pattern (abstract & column 11, lines 34-49), characterized in that the position-coding pattern on the pad is divided into at least two regions (active area, (figure 1, (22), (escutcheon, (figure 1, (24,)) & (right and left buttons (figure 1, (32 & 34)) which are intended to achieve different functions of an input unit arrangement (figures 1-7, abstract, column 4, lines 49-67 and column 12, lines 29-67).

Du does not expressly teach a mouse pad.

However, the touch pad (figure 1, (20)) could be used as a mouse pad.

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to have the touch pad into the system so as to increase the versatility of the device.

Art Unit: 2673

As to claim 25, Du teaches that each of the at least two regions (active area, (figure 1, (22)), (escutcheon, (figure 1, (24,)) & (right and left buttons (figure 1, (32 & 34)) is provided with a visual indication which makes it possible for a user to understand which function of the input unit arrangement is achieved by means of the respective regions (figures 1-7, abstract, column 4, lines 49-67 and column 12, lines 29-67).

As to claim 26, Du teaches that at least one region is intended for generating a command for controlling an external electronic device (column 4, lines 49-67).

As to claim 27, Du teaches the command concerns execution of software on the electronic device (column 9, lines 14-62 and column 11, lines 34-49).

As to claim 28, Du teaches that at least two regions comprise a region (active area, (figure 1, (22)), (escutcheon, (figure 1, (24,)) & (right and left buttons (figure 1, (32 & 34)) which is dedicated to achieving an absolute mouse function of the input unit arrangement (figures 1-7, abstract, column 4, lines 49-67 and column 12, lines 29-67).

7. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Du in view Hamamura.

Du discloses all claimed limitation in claim 29 except that a scrolling function.

Hamamura teaches the mouse function more comprises a scrolling function (scroll key, (figure 2, (7E)) (column 4, lines 1-12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Hamamura's input device teaching a scrolling function into Du's

Art Unit: 2673

device so as to scroll the screen in up and down directions when the list of recorded information is displayed on the display (column 4, lines 10-12).

Allowable Subject Matter

8. Claims 5 and 41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Mansour M. Said** whose telephone number is **(703) 306-5411**.

The examiner can normally be reached on Monday through Thursday from 8:30 a.m. to 6:00 p.m. The examiner can also be reached on alternate Friday from 8:30 a.m. to 5:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Shalwala Bipin**, can be reached at **(703) 305-4938**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

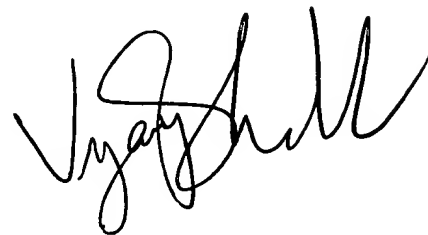
Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist)

Art Unit: 2673

10. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer service Office whose telephone number is (703) 306-0377.

Mansour M. Said

August 20, 2003

A handwritten signature in black ink, appearing to read 'Vijay Shankar', written in a cursive style.

**VIJAY SHANKAR
PRIMARY EXAMINER**